

Amendments

In the Claims:

Please cancel claims 52, 55, 67, 70-73, 79, 90, 93, 105, 108-111, 117, 129, 132, 144, 147-150, and 156.

Please amend the following claims:

38 (Once amended). An isolated polypeptide not more than 100 amino acids in length comprising at least one C35 peptide epitope selected from the group consisting of: amino acids S-9 to V-17 of SEQ ID NO:2, amino acids V-10 to V-17 of SEQ ID NO:2, amino acids E-16 to V-23 of SEQ ID NO:2, amino acids E-16 to R-24 of SEQ ID NO:2, amino acids E-16 to I-25 of SEQ ID NO:2, amino acids S-21 to F-35 of SEQ ID NO:2, amino acids G-22 to C-30 of SEQ ID NO:2, amino acids C-30 to T-38 of SEQ ID NO:2, amino acids E-31 to Y-39 of SEQ ID NO:2, amino acids E-36 to A-43 of SEQ ID NO:2, amino acids A-37 to A-45 of SEQ ID NO:2, amino acids A-37 to V-46 of SEQ ID NO:2, amino acids Y-39 to V-46 of SEQ ID NO:2, amino acids S-44 to I-53 of SEQ ID NO:2, amino acids A-45 to I-53; of SEQ ID NO:2, amino acids G-52 to L-59 of SEQ ID NO:2, amino acids E-54 to T-62 of SEQ ID NO:2, amino acids S-57 to F-75 of SEQ ID NO:2, amino acids R-58 to I-67 of SEQ ID NO:2, amino acids G-61 to I-69 of SEQ ID NO:2, amino acids G-63 to F-83 of SEQ ID NO:2, amino acids E-66 to L-73 of SEQ ID NO:2, amino acids E-66 to V-74 of SEQ ID NO:2, amino acids F-83 to E-103 of SEQ ID NO:2, amino acids D-88 to A-96 of SEQ ID NO:2, amino acids L-89 to A-96 of SEQ ID NO:2,

F₁ amino acids A-92 to T-101 of SEQ ID NO:2, amino acids R-95 to L-102 of SEQ ID NO:2, amino acids A-96 to K-104 of SEQ ID NO:2, amino acids K-104 to V-113 of SEQ ID NO:2, amino acids I-105 to V-113 of SEQ ID NO:2, amino acids I-105 to I-114 of SEQ ID NO:2.

F₂ 84 (Once amended). A fusion protein comprising at least one C35 peptide epitope, wherein said at least one C35 peptide epitope is a peptide epitope selected from the group consisting of: amino acids S-9 to V-17 of SEQ ID NO:2, amino acids V-10 to V-17 of SEQ ID NO:2, amino acids E-16 to V-23 of SEQ ID NO:2, amino acids E-16 to R-24 of SEQ ID NO:2, amino acids E-16 to I-25 of SEQ ID NO:2, amino acids S-21 to F-35 of SEQ ID NO:2, amino acids G-22 to C-30 of SEQ ID NO:2, amino acids C-30 to T-38 of SEQ ID NO:2, amino acids E-31 to Y-39 of SEQ ID NO:2, amino acids E-36 to A-43 of SEQ ID NO:2, amino acids A-37 to A-45 of SEQ ID NO:2, amino acids A-37 to V-46 of SEQ ID NO:2, amino acids Y-39 to V-46 of SEQ ID NO:2, amino acids S-44 to I-53 of SEQ ID NO:2, amino acids A-45 to I-53; of SEQ ID NO:2, amino acids G-52 to L-59 of SEQ ID NO:2, amino acids E-54 to T-62 of SEQ ID NO:2, amino acids S-57 to F-75 of SEQ ID NO:2, amino acids R-58 to I-67 of SEQ ID NO:2, amino acids G-61 to I-69 of SEQ ID NO:2, amino acids G-63 to F-83 of SEQ ID NO:2, amino acids E-66 to L-73 of SEQ ID NO:2, amino acids E-66 to V-74 of SEQ ID NO:2, amino acids F-83 to E-103 of SEQ ID NO:2, amino acids D-88 to A-96 of SEQ ID NO:2, amino acids L-89 to A-96 of SEQ ID NO:2, amino acids A-92 to T-101 of SEQ ID NO:2, amino acids R-95 to L-102 of SEQ ID NO:2, amino acids A-96 to K-104 of SEQ ID NO:2, amino acids

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K-104 to V-113 of SEQ ID NO:2, amino acids I-105 to V-113 of SEQ ID NO:2, amino acids I-105 to I-114 of SEQ ID NO:2.

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123 (Once amended). An isolated C35 peptide epitope selected from the group consisting of: amino acids S-9 to V-17 of SEQ ID NO:2, amino acids V-10 to V-17 of SEQ ID NO:2, amino acids E-16 to V-23 of SEQ ID NO:2, amino acids E-16 to R-24 of SEQ ID NO:2, amino acids E-16 to I-25 of SEQ ID NO:2, amino acids S-21 to F-35 of SEQ ID NO:2, amino acids G-22 to C-30 of SEQ ID NO:2, amino acids C-30 to T-38 of SEQ ID NO:2, amino acids E-31 to Y-39 of SEQ ID NO:2, amino acids E-36 to A-43 of SEQ ID NO:2, amino acids A-37 to A-45 of SEQ ID NO:2, amino acids A-37 to V-46 of SEQ ID NO:2, amino acids Y-39 to V-46 of SEQ ID NO:2, amino acids S-44 to I-53 of SEQ ID NO:2, amino acids A-45 to I-53; of SEQ ID NO:2, amino acids G-52 to L-59 of SEQ ID NO:2, amino acids E-54 to T-62 of SEQ ID NO:2, amino acids S-57 to F-75 of SEQ ID NO:2, amino acids R-58 to I-67 of SEQ ID NO:2, amino acids G-61 to I-69 of SEQ ID NO:2, amino acids G-63 to F-83 of SEQ ID NO:2, amino acids E-66 to L-73 of SEQ ID NO:2, amino acids E-66 to V-74 of SEQ ID NO:2, amino acids F-83 to E-103 of SEQ ID NO:2, amino acids D-88 to A-96 of SEQ ID NO:2, amino acids L-89 to A-96 of SEQ ID NO:2, amino acids A-92 to T-101 of SEQ ID NO:2, amino acids R-95 to L-102 of SEQ ID NO:2, amino acids A-96 to K-104 of SEQ ID NO:2, amino acids K-104 to V-113 of SEQ ID NO:2, amino acids I-105 to V-113 of SEQ ID NO:2, amino acids I-105 to I-114 of SEQ ID NO:2.

Please add new claims 167-209.

167 (New). An isolated polypeptide not more than 100 amino acids in length comprising at least one C35 peptide epitope selected from the group consisting of: amino acids S-21 to Y-29 of SEQ ID NO:2, amino acids I-25 to C-30 of SEQ ID NO:2, amino acids T-38 to V-46 of SEQ ID NO:2, amino acids F-65 to L-73 of SEQ ID NO:2, amino acids I-67 to F-75 of SEQ ID NO:2, amino acids K-77 to Y-85 of SEQ ID NO:2, amino acids Q-72 to E-86 of SEQ ID NO:2, amino acids G-81 to L-89 of SEQ ID NO:2, and amino acids K-104 to C-112 of SEQ ID NO:2.

F4 168 (New). An isolated polypeptide according to claim 167, wherein said polypeptide is not more than 90 amino acids in length.

169 (New). An isolated polypeptide according to claim 167, wherein said polypeptide is not more than 80 amino acids in length.

170 (New). An isolated polypeptide according to claim 167, wherein said polypeptide is not more than 70 amino acids in length.

171 (New). An isolated polypeptide according to claim 167, wherein said polypeptide is not more than 60 amino acids in length.

172 (New). An isolated polypeptide according to claim 167, wherein said polypeptide is not more than 50 amino acids in length.

173 (New). An isolated polypeptide according to claim 167, wherein said polypeptide is not more than 40 amino acids in length.

174 (New). An isolated polypeptide according to claim 167, wherein said polypeptide is not more than 30 amino acids in length.

F4 175 (New). An isolated polypeptide according to claim 167, wherein said polypeptide is not more than 20 amino acids in length.

176 (New). An isolated polypeptide according to claim 167, wherein said C35 peptide epitope is amino acids S-21 to Y-29 of SEQ ID NO:2.

177 (New). An isolated polypeptide according to claim 167, wherein said C35 peptide epitope is amino acids I-25 to C-30 of SEQ ID NO:2.

178 (New). An isolated polypeptide according to claim 167, wherein said C35 peptide epitope is amino acids T-38 to V-46 of SEQ ID NO:2.

179 (New). An isolated polypeptide according to claim 167, wherein said C35 peptide epitope is amino acids F-65 to L-73 of SEQ ID NO:2.

180 (New). An isolated polypeptide according to claim 167, wherein said C35 peptide epitope is amino acids I-67 to F-75 of SEQ ID NO:2.

181 (New). An isolated polypeptide according to claim 167, wherein said C35 peptide epitope is amino acids K-77 to Y-85 of SEQ ID NO:2.

182 (New). An isolated polypeptide according to claim 167, wherein said C35 peptide epitope is amino acids Q-72 to E-86 of SEQ ID NO:2.

183 (New). An isolated polypeptide according to claim 167, wherein said C35 peptide epitope is amino acids G-81 to L-89 of SEQ ID NO:2.

184 (New). An isolated polypeptide according to claim 167, wherein said C35 peptide epitope is amino acids K-104 to C-112 of SEQ ID NO:2.

185 (New). A fusion protein comprising at least one C35 peptide epitope, wherein said at least one C35 peptide epitope is a peptide epitope selected from the group consisting of: amino acids S-21 to Y-29 of SEQ ID NO:2, amino acids I-25 to C-30 of SEQ ID NO:2, amino acids T-38 to V-46 of SEQ ID NO:2, amino acids F-65 to L-73 of SEQ ID NO:2, amino acids I-67 to F-75 of SEQ ID NO:2, amino acids K-77 to Y-85 of SEQ ID NO:2, amino acids Q-72 to E-86 of SEQ ID NO:2, amino acids G-81 to L-89 of SEQ ID NO:2, and amino acids K-104 to C-112 of SEQ ID NO:2.

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186 (New). A fusion protein according to claim 185, wherein said C35 peptide epitope is amino acids S-21 to Y-29 of SEQ ID NO:2.

187 (New). A fusion protein according to claim 185, wherein said C35 peptide epitope is amino acids I-25 to C-30 of SEQ ID NO:2.

188 (New). A fusion protein according to claim 185, wherein said C35 peptide epitope is amino acids T-38 to V-46 of SEQ ID NO:2.

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189 (New). A fusion protein according to claim 185, wherein said C35 peptide epitope is amino acids F-65 to L-73 of SEQ ID NO:2.

190 (New). A fusion protein according to claim 185, wherein said C35 peptide epitope is amino acids I-67 to F-75 of SEQ ID NO:2.

191 (New). A fusion protein according to claim 185, wherein said C35 peptide epitope is amino acids K-77 to Y-85 of SEQ ID NO:2.

192 (New). A fusion protein according to claim 185, wherein said C35 peptide epitope is amino acids Q-72 to E-86 of SEQ ID NO:2.

193 (New). A fusion protein according to claim 185, wherein said C35 peptide epitope is amino acids G-81 to L-89 of SEQ ID NO:2.

194 (New). A fusion protein according to claim 185, wherein said C35 peptide epitope is amino acids K-104 to C-112 of SEQ ID NO:2.

195 (New). A fusion protein according to claim 185, wherein said C35 peptide epitope is linked to a heterologous epitope.

F4 196 (New). An isolated C35 peptide epitope selected from the group consisting of: amino acids S-21 to Y-29 of SEQ ID NO:2, amino acids I-25 to C-30 of SEQ ID NO:2, amino acids T-38 to V-46 of SEQ ID NO:2, amino acids F-65 to L-73 of SEQ ID NO:2, amino acids I-67 to F-75 of SEQ ID NO:2, amino acids K-77 to Y-85 of SEQ ID NO:2, amino acids Q-72 to E-86 of SEQ ID NO:2, amino acids G-81 to L-89 of SEQ ID NO:2, and amino acids K-104 to C-112 of SEQ ID NO:2.

197 (New). An isolated C35 peptide epitope according to claim 196, wherein said C35 peptide epitope is amino acids S-21 to Y-29 of SEQ ID NO:2.

198 (New). An isolated C35 peptide epitope according to claim 196, wherein said C35 peptide epitope is amino acids I-25 to C-30 of SEQ ID NO:2.

199 (New). An isolated C35 peptide epitope according to claim 196, wherein said C35 peptide epitope is amino acids T-38 to V-46 of SEQ ID NO:2.

200 (New). An isolated C35 peptide epitope according to claim 196, wherein said C35 peptide epitope is amino acids F-65 to L-73 of SEQ ID NO:2.

201 (New). An isolated C35 peptide epitope according to claim 196, wherein said C35 peptide epitope is amino acids I-67 to F-75 of SEQ ID NO:2.

202 (New). An isolated C35 peptide epitope according to claim 196, wherein said C35 peptide epitope is amino acids K-77 to Y-85 of SEQ ID NO:2.

F4 203 (New). An isolated C35 peptide epitope according to claim 196, wherein said C35 peptide epitope is amino acids Q-72 to E-86 of SEQ ID NO:2.

204 (New). An isolated C35 peptide epitope according to claim 196, wherein said C35 peptide epitope is amino acids G-81 to L-89 of SEQ ID NO:2.

205 (New). An isolated C35 peptide epitope according to claim 196, wherein said C35 peptide epitope is amino acids K-104 to C-112 of SEQ ID NO:2.

206 (New). A composition comprising an isolated polypeptide according to any one of claims 167-184 and a pharmaceutically acceptable carrier.

207 (New). A composition comprising a fusion protein according claim 185 and a pharmaceutically acceptable carrier.

208 (New). A composition comprising a fusion protein according to claim 195
and a pharmaceutically acceptable carrier.

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209 (New). A composition comprising an isolated C35 peptide epitope
according to claim 196 and a pharmaceutically acceptable carrier.
